

**CRF Errors Edited by the STIC Systems  
Branch**

11  
5

Serial Number: 101031,474

CRF Edit Date: 9-17-03  
Edited by: RG

\_\_\_ Realigned nucleic acid/amino acid numbers/text in cases where the sequence text "wrapped" to the next line

\_\_\_ Corrected the SEQ ID NO. Sequence numbers edited were:

**ENTERED**

\_\_\_ Inserted or corrected a nucleic number at the end of a nucleic line. SEQ ID NO's edited:

X Deleted: X invalid beginning/end-of-file text ; 1 page numbers

\_\_\_ Inserted mandatory headings/numeric identifiers, specifically:

\_\_\_ Moved responses to same line as heading/numeric identifier, specifically:

\_\_\_ Other:

# ENTERED



PCT10

## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:45:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

```

3 <110> APPLICANT: Donna T. Ward
4      Lex M. Cowsert
6 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF JUN N-TERMINAL KINASE KINASE-1
EXPRESSION
8 <130> FILE REFERENCE: RTSP-0249
C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/031,474
C--> 10 <141> CURRENT FILING DATE: 2002-01-17
10 <150> PRIOR APPLICATION NUMBER: US 09/358,382
11 <151> PRIOR FILING DATE: 1999-07-21
13 <160> NUMBER OF SEQ ID NOS: 47
15 <210> SEQ ID NO: 1
16 <211> LENGTH: 3576
17 <212> TYPE: DNA
18 <213> ORGANISM: Homo sapiens
20 <220> FEATURE:
21 <221> NAME/KEY: CDS
22 <222> LOCATION: (10)..(1209)
24 <400> SEQUENCE: 1
25 ctcccaaca atg gcg gct ccg agc ccg agc ggc ggc ggc ggc tcc ggg      48
26      Met Ala Ala Pro Ser Pro Ser Gly Gly Gly Gly Ser Gly
27      1          5          10
29 ggc ggc agc ggc agc ggc acc ccc ggc ccc gta ggg tcc ccg gcg cca      96
30 Gly Gly Ser Gly Ser Gly Thr Pro Gly Pro Val Gly Ser Pro Ala Pro
31      15          20          25
33 ggc cac ccg gcc gtc agc agc atg cag ggt aaa cgc aaa gca ctg aag      144
34 Gly His Pro Ala Val Ser Ser Met Gln Gly Lys Arg Lys Ala Leu Lys
35      30          35          40          45
37 ttg aat ttt gca aat cca cct ttc aaa tct aca gca agg ttt act ctg      192
38 Leu Asn Phe Ala Asn Pro Pro Phe Lys Ser Thr Ala Arg Phe Thr Leu
39      50          55          60
41 aat ccc aat cct aca gga gtt caa aac cca cac ata gag aga ctg aga      240
42 Asn Pro Asn Pro Thr Gly Val Gln Asn Pro His Ile Glu Arg Leu Arg
43      65          70          75
45 aca cac agc att gag tca tca gga aaa ctg aag atc tcc cct gaa caa      288
46 Thr His Ser Ile Glu Ser Ser Gly Lys Leu Lys Ile Ser Pro Glu Gln
47      80          85          90
49 cac tgg gat ttc act gca gag gac ttg aaa gac ctt gga gaa att gga      336
50 His Trp Asp Phe Thr Ala Glu Asp Leu Lys Asp Leu Gly Glu Ile Gly
51      95          100          105
53 cga gga gct tat ggt tct gtc aac aaa atg gtc cac aaa cca agt ggg      384
54 Arg Gly Ala Tyr Gly Ser Val Asn Lys Met Val His Lys Pro Ser Gly
55      110          115          120          125
57 caa ata atg gca gtt aaa aga att cgg tca aca gtg gat gaa aaa gaa      432
58 Gln Ile Met Ala Val Lys Arg Ile Arg Ser Thr Val Asp Glu Lys Glu

```

## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:45:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

```

59          130          135          140
61 caa aaa caa ctt ctt atg gat ttg gat gta gta atg cgg agt agt gat 480
62 Gln Lys Gln Leu Leu Met Asp Leu Asp Val Val Met Arg Ser Ser Asp
63          145          150          155
65 tgc cca tac att gtt cag ttt tat ggt gca ctc ttc aga gag ggt gac 528
66 Cys Pro Tyr Ile Val Gln Phe Tyr Gly Ala Leu Phe Arg Glu Gly Asp
67          160          165          170
69 tgt tgg atc tgt atg gaa ctc atg tct acc tcg ttt gat aag ttt tac 576
70 Cys Trp Ile Cys Met Glu Leu Met Ser Thr Ser Phe Asp Lys Phe Tyr
71          175          180          185
73 aaa tat gta tat agt gta tta gat gat gtt att cca gaa gaa att tta 624
74 Lys Tyr Val Tyr Ser Val Leu Asp Asp Val Ile Pro Glu Glu Ile Leu
75 190          195          200          205
77 ggc aaa atc act tta gca act gtg aaa gca cta aac cac tta aaa gaa 672
78 Gly Lys Ile Thr Leu Ala Thr Val Lys Ala Leu Asn His Leu Lys Glu
79          210          215          220
81 aac ttg aaa att att cac aga gat atc aaa cct tcc aat att ctt ctg 720
82 Asn Leu Lys Ile Ile His Arg Asp Ile Lys Pro Ser Asn Ile Leu Leu
83          225          230          235
85 gac aga agt gga aat att aag ctc tgt gac ttc ggc atc agt gga cag 768
86 Asp Arg Ser Gly Asn Ile Lys Leu Cys Asp Phe Gly Ile Ser Gly Gln
87          240          245          250
89 ctt gtg gac tct att gcc aag aca aga gat gct ggc tgt agg cca tac 816
90 Leu Val Asp Ser Ile Ala Lys Thr Arg Asp Ala Gly Cys Arg Pro Tyr
91          255          260          265
93 atg gca cct gaa aga ata gac cca agc gca tca cga caa gga tat gat 864
94 Met Ala Pro Glu Arg Ile Asp Pro Ser Ala Ser Arg Gln Gly Tyr Asp
95 270          275          280          285
97 gtc cgc tct gat gtc tgg agt ttg ggg atc aca ttg tat gag ttg gcc 912
98 Val Arg Ser Asp Val Trp Ser Leu Gly Ile Thr Leu Tyr Glu Leu Ala
99          290          295          300
101 aca ggc cga ttt cct tat cca aag tgg aat agt gta ttt gat caa cta 960
102 Thr Gly Arg Phe Pro Tyr Pro Lys Trp Asn Ser Val Phe Asp Gln Leu
103          305          310          315
105 aca caa gtc gtg aaa gga gat cct ccg cag ctg agt aat tct gag gaa 1008
106 Thr Gln Val Val Lys Gly Asp Pro Pro Gln Leu Ser Asn Ser Glu Glu
107          320          325          330
109 agg gaa ttc tcc ccg agt ttc atc aac ttt gtc aac ttg tgc ctt acg 1056
110 Arg Glu Phe Ser Pro Ser Phe Ile Asn Phe Val Asn Leu Cys Leu Thr
111          335          340          345
113 aag gat gaa tcc aaa agg cca aag tat aaa gag ctt ctg aaa cat ccc 1104
114 Lys Asp Glu Ser Lys Arg Pro Lys Tyr Lys Glu Leu Leu Lys His Pro
115 350          355          360          365
117 ttt att ttg atg tat gaa gaa cgt gcc gtt gag gtc gca tgc tat gtt 1152
118 Phe Ile Leu Met Tyr Glu Glu Arg Ala Val Glu Val Ala Cys Tyr Val
119          370          375          380
121 tgt aaa atc ctg gat caa atg cca gct act ccc agc tct ccc atg tat 1200
122 Cys Lys Ile Leu Asp Gln Met Pro Ala Thr Pro Ser Ser Pro Met Tyr
123          385          390          395

```

## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:45:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

```

125 gtc gat tga tatcgctgct acatcagact ctagaaaaaa gggctgagag gaagcaagac 1259
126 Val Asp
128 gtaaagaatt ttcattccgt atcacagtgt ttttattgct cgcccagaca ccatgtgcaa 1319
130 taagattggt gttcgtttcc atcatgtctg tatactcctg tcacctagaa cgtgcatcct 1379
132 tgtaatacct gattgatcac acagtgttag tgctggtcag agagacctca tcctgctctt 1439
134 ttgtgatgaa catattcatg aaatgtggaa gtcagtacga tcaagttggt gactgtgatt 1499
136 agatcacatc ttaaatccat ttctagactc aaaacctgga gatgcagcta ctggaatggt 1559
138 gttttgtcag acttccaaat cctggaagga cacagtgatg aatgtactat atctgaacat 1619
140 agaaactcgg gcttgagtga gaagagcttg cacagccaac gagacacatt gccttctgga 1679
142 gctgggagac aaaggaggaa tttactttct tcaccaagtg caatagatta ctgatgtgat 1739
144 attctgttgc tttacagtta cagttgatgt ttggggatcg atgtgctcag ccaaatttcc 1799
146 tgtttgaaat atcatgttaa attagaatga atttatcttt accaaaaacc atgttgctgt 1859
148 caaagagggtg aacattaaaa tatagagaca ggacagaatg tgttcttttc tcctctacca 1919
150 gtcctatttt tcaatgggaa gactcaggag tctgccactt gtcaaagaag gtgctgatcc 1979
152 taagaatttt tcattctcag aattcgggtg gctgccaact tgatgttcca cctgccacaa 2039
154 accaccagga ctgaaagaag aaaacagtac agaaggcaaa gtttacagat gtttttaatt 2099
156 ctagtatttt atctggaaca acttgtagca gctatatatt tccccttggg cccaagcctg 2159
158 atacttttagc catcataact cactaacagg gagaagtagc tagtagcaat gtgccttgat 2219
160 tgattagata aagattttcta gtaggcagca aaagacccaa tctcagttgt ttgcttcttg 2279
162 ccatcactgg tccaggctct cagtttccga atctctttcc cttcccctgt ggtctattgt 2339
164 cgctatgtga cttgcgctta atccaatatt ttgccttttt tctatatcaa aaaaccttta 2399
166 cagtttagcag ggtatgttct taccgaggat ttttaacccc caatctctca taatcgctag 2459
168 tgtttaaaag gctaagaata gtggggccca accgatgtgg taggtgataa agaggcatct 2519
170 tttctagaga cacattggac cagatgagga tccgaaacgg cagcctttac gttcatcacc 2579
172 tgctagaacc tctcgtagtc catcaccatt tcttggcatt ggaattctac tggaaaaaaa 2639
174 tacaaaaagc aaaacaaaac cctcagcact gttacaagag gccatttaag tatcttgtgc 2699
176 ttcttcactt acccattagc caggttctca ttaggttttg cttgggcctc cctggcactg 2759
178 aaccttaggc tttgtatgac agtgaagcag cactgtgagt gggtcaagca cactggaata 2819
180 taaaacagtc atggcctgag atgcagggtg tgccattaca gaaccaaatac gtggcacgta 2879
182 ttgctgtgtc tcctctcaga gtgacagtca taaatactgt caaacaataa agggagaatg 2939
184 gtgctgttta aagtcacatc cctgtaaatt gcagaattca aaagtgatta tctctttgat 2999
186 ctacttgcct catttcccta tcttctcccc cacggtatcc taaactttag acttccccact 3059
188 gttctgaaag gagacattgc tctatgtctg ccttcgacca cagcaagcca tcatcctcca 3119
190 ttgctcccgg ggactcaaga ggaatctgtt tctctgctgt caacttccca tctggctcag 3179
192 cataggggtca ctttgccatt atgcaaatgg agataaaaagc aattctggct gtccaggagc 3239
194 taatctgacc gttctattgt gtggatgacc acataagaag gcaatttttag tgtattaatc 3299
196 atagattatt ataaactata aacttaaggc caaggagtgt attacaatgt atctttatta 3359
198 aaacaaaagg gtgtatagtg ttcacaaact gtgaaaatag tgtaagaact gtacattgtg 3419
200 agctctgggt atttttctct tgtaccatag aaaaatgtat aaaaattatc aaaaagctaa 3479
202 tgtgcaggga tattgcctta tttgtctgta aaaaatggag ctcagtaaca taactgcttc 3539
204 ttggagcttt ggaatatttt atcctgtatt cttgtttt 3576
207 <210> SEQ ID NO: 2
208 <211> LENGTH: 26
209 <212> TYPE: DNA
210 <213> ORGANISM: Artificial Sequence
212 <220> FEATURE:
213 <223> OTHER INFORMATION: PCR Primer
215 <400> SEQUENCE: 2
216 ccacacatag agagactgag aacaca

```

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## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:45:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

```

219 <210> SEQ ID NO: 3
220 <211> LENGTH: 21
221 <212> TYPE: DNA
222 <213> ORGANISM: Artificial Sequence
224 <220> FEATURE:
225 <223> OTHER INFORMATION: PCR Primer
227 <400> SEQUENCE: 3
228 tgcagtgaaa tcccagtgtt g                21
231 <210> SEQ ID NO: 4
232 <211> LENGTH: 32
233 <212> TYPE: DNA
234 <213> ORGANISM: Artificial Sequence
236 <220> FEATURE:
237 <223> OTHER INFORMATION: PCR Probe
239 <400> SEQUENCE: 4
240 cattgagtca tcaggaaaac tgaagatctc cc      32
243 <210> SEQ ID NO: 5
244 <211> LENGTH: 19
245 <212> TYPE: DNA
246 <213> ORGANISM: Artificial Sequence
248 <220> FEATURE:
249 <223> OTHER INFORMATION: PCR Primer
251 <400> SEQUENCE: 5
252 gaaggtgaag gtcggagtc                19
255 <210> SEQ ID NO: 6
256 <211> LENGTH: 20
257 <212> TYPE: DNA
258 <213> ORGANISM: Artificial Sequence
260 <220> FEATURE:
261 <223> OTHER INFORMATION: PCR Primer
263 <400> SEQUENCE: 6
264 gaagatggtg atgggatttc                20
267 <210> SEQ ID NO: 7
268 <211> LENGTH: 20
269 <212> TYPE: DNA
270 <213> ORGANISM: Artificial Sequence
272 <220> FEATURE:
273 <223> OTHER INFORMATION: PCR Probe
275 <400> SEQUENCE: 7
276 caagcttccc gttctcagcc                20
279 <210> SEQ ID NO: 8
280 <211> LENGTH: 20
281 <212> TYPE: DNA
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Antisense Oligonucleotide
287 <400> SEQUENCE: 8
288 ggagcgcgcca ttgttgggag                20
291 <210> SEQ ID NO: 9

```

## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:45:40

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

```

292 <211> LENGTH: 20
293 <212> TYPE: DNA
294 <213> ORGANISM: Artificial Sequence
296 <220> FEATURE:
297 <223> OTHER INFORMATION: Antisense Oligonucleotide
299 <400> SEQUENCE: 9
300 ggctcggagc cgccattggt 20
303 <210> SEQ ID NO: 10
304 <211> LENGTH: 20
305 <212> TYPE: DNA
306 <213> ORGANISM: Artificial Sequence
308 <220> FEATURE:
309 <223> OTHER INFORMATION: Antisense Oligonucleotide
311 <400> SEQUENCE: 10
312 gctcgggctc ggagccgcca 20
315 <210> SEQ ID NO: 11
316 <211> LENGTH: 20
317 <212> TYPE: DNA
318 <213> ORGANISM: Artificial Sequence
320 <220> FEATURE:
321 <223> OTHER INFORMATION: Antisense Oligonucleotide
323 <400> SEQUENCE: 11
324 gagccgcccgc cgccgctcgg 20
327 <210> SEQ ID NO: 12
328 <211> LENGTH: 20
329 <212> TYPE: DNA
330 <213> ORGANISM: Artificial Sequence
332 <220> FEATURE:
333 <223> OTHER INFORMATION: Antisense Oligonucleotide
335 <400> SEQUENCE: 12
336 atgctgctga cggccgggtg 20
339 <210> SEQ ID NO: 13
340 <211> LENGTH: 20
341 <212> TYPE: DNA
342 <213> ORGANISM: Artificial Sequence
344 <220> FEATURE:
345 <223> OTHER INFORMATION: Antisense Oligonucleotide
347 <400> SEQUENCE: 13
348 caacttcagt gctttgcgtt 20
351 <210> SEQ ID NO: 14
352 <211> LENGTH: 20
353 <212> TYPE: DNA
354 <213> ORGANISM: Artificial Sequence
356 <220> FEATURE:
357 <223> OTHER INFORMATION: Antisense Oligonucleotide
359 <400> SEQUENCE: 14
360 gagtaaacct tgctgtagat 20
363 <210> SEQ ID NO: 15
364 <211> LENGTH: 20

```

**VERIFICATION SUMMARY**

PATENT APPLICATION: US/10/031,474

DATE: 09/17/2003

TIME: 13:45:41

Input Set : A:\PTO.AMC.txt

Output Set: N:\CRF4\09172003\J031474.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date



PCT10

## RAW SEQUENCE LISTING

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:44:55

Input Set : A:\Sequence

Output Set: N:\CRF4\09172003\J031474.raw

3 <110> APPLICANT: Donna T. Ward  
 4 Lex M. Cowsert  
 6 <120> TITLE OF INVENTION: ANTISENSE MODULATION OF JUN N-TERMINAL KINASE KINASE-1  
 EXPRESSION  
 8 <130> FILE REFERENCE: RTSP-0249  
 C--> 10 <140> CURRENT APPLICATION NUMBER: US/10/031,474  
 C--> 10 <141> CURRENT FILING DATE: 2002-01-17  
 10 <150> PRIOR APPLICATION NUMBER: US 09/358,382  
 11 <151> PRIOR FILING DATE: 1999-07-21  
 13 <160> NUMBER OF SEQ ID NOS: 47

**Does Not Comply**  
**Corrected Diskette Needed**

## ERRORED SEQUENCES

747 <210> SEQ ID NO: 47  
 748 <211> LENGTH: 20  
 749 <212> TYPE: DNA  
 750 <213> ORGANISM: Artificial Sequence  
 752 <220> FEATURE:  
 753 <223> OTHER INFORMATION: Antisense Oligonucleotide  
 755 <400> SEQUENCE: 47  
 756 ttgtgttttaa taaagataca  
 E--> 761 13

20

13 delete



## VERIFICATION SUMMARY

DATE: 09/17/2003

PATENT APPLICATION: US/10/031,474

TIME: 13:44:56

Input Set : A:\Sequence

Output Set: N:\CRF4\09172003\J031474.raw

L:10 M:270 C: Current Application Number differs, Replaced Current Application No

L:10 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:761 M:254 E: No. of Bases conflict, this line has no nucleotides.